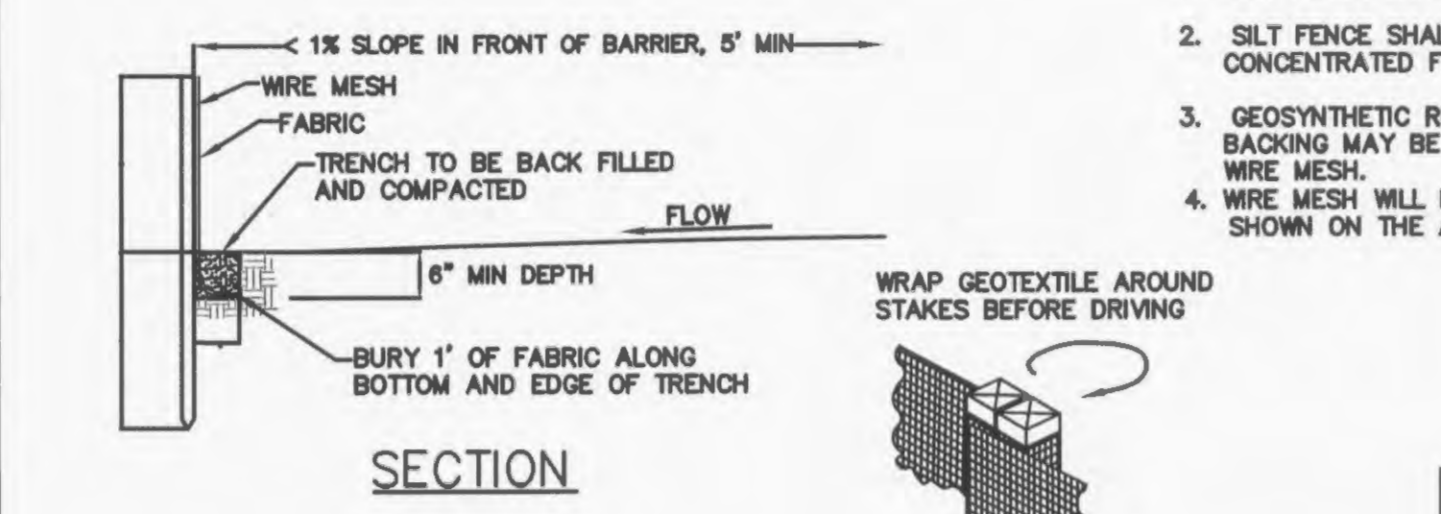
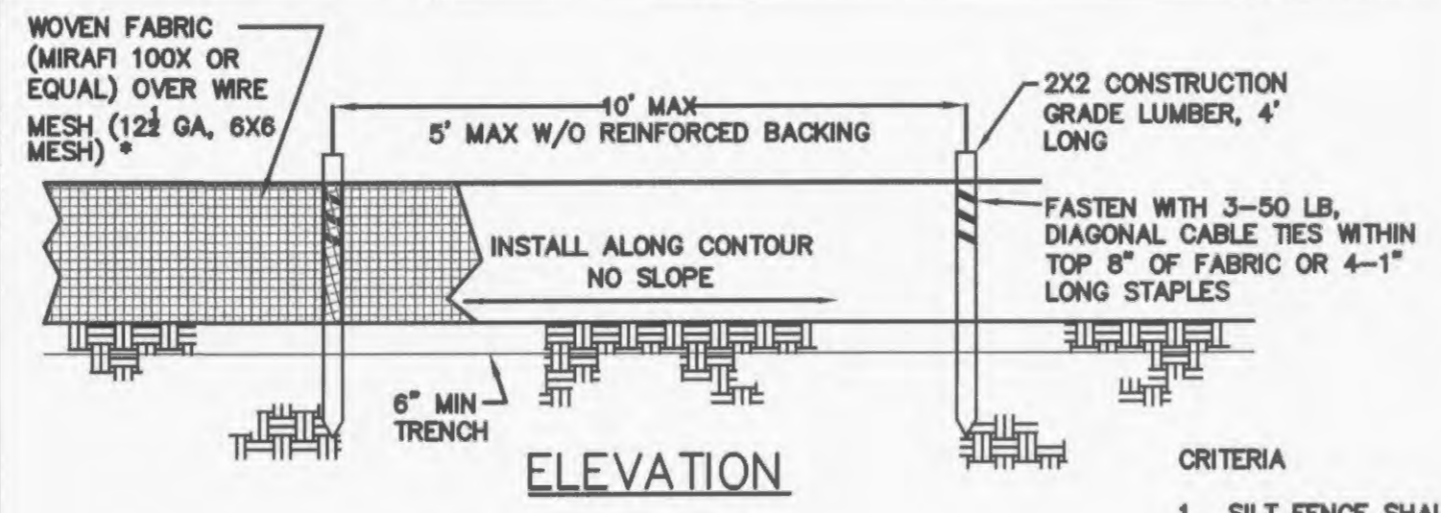


- DESIGN CRITERIA**
- SILT FENCE FOR SHEET FLOW SHALL HAVE A MAXIMUM DRAINAGE AREA OF 1/4 ACRE PER 100 LF.
 - STRAW BALE BARRIERS FOR SHEET FLOW SHALL HAVE A MAXIMUM DRAINAGE AREA OF 1/4 ACRE PER 100 LF.
 - REFER TO INDIVIDUAL ESC FIGURE FOR INSTALLATION.
 - TERRACING INCLUDES LOGS, WATTLES & FILTER SOCKS.

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SPACING CHART FOR EBC DEVICES

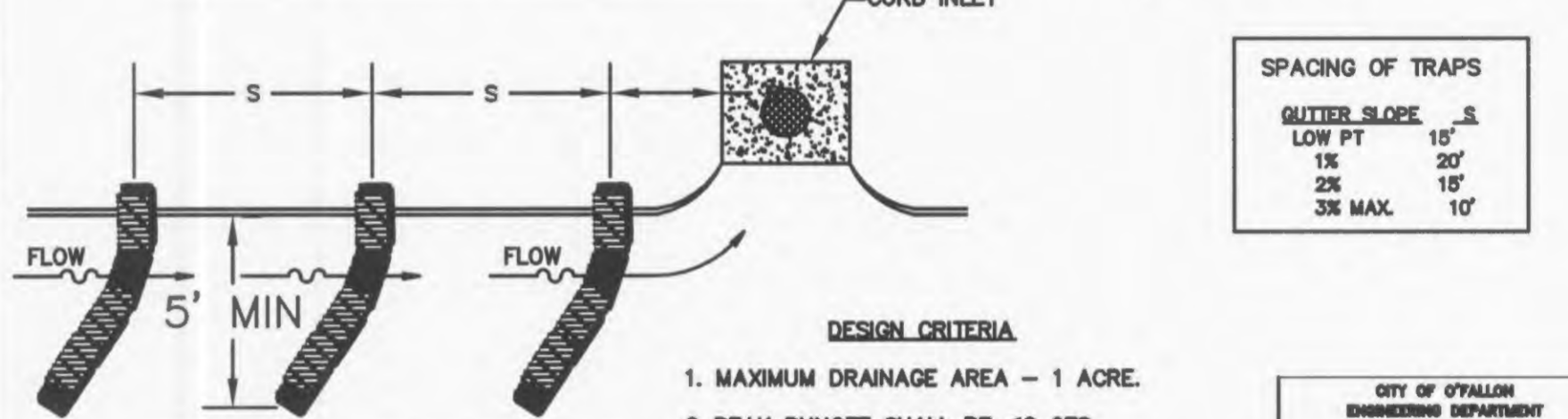
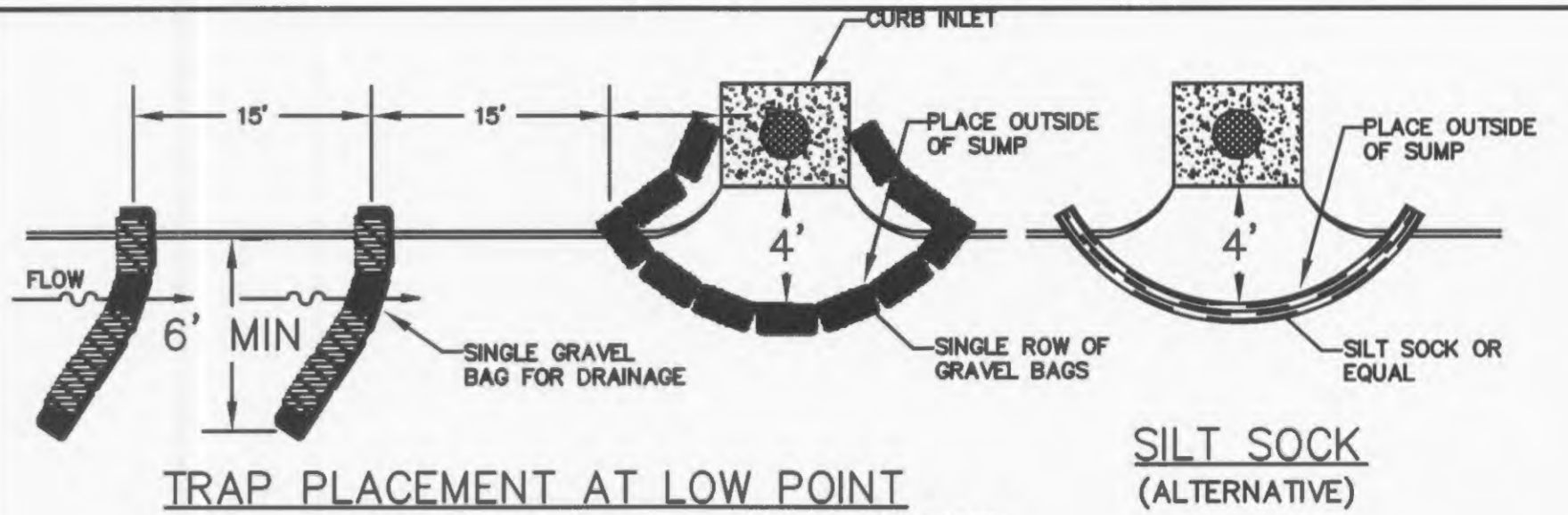


- CRITERIA**
- SILT FENCE SHALL BE 24 INCHES HIGH.
 - SILT FENCE SHALL NOT BE USED FOR CONCENTRATED FLOWS.
 - GEOSYNTHETIC REINFORCED SILT FENCE BACKING MAY BE USED IN LIEU OF WIRE MESH.
 - WIRE MESH WILL BE USED AT LOCATIONS SHOWN ON THE APPROVED SWPPP.

NOTE: IF FABRIC IS INSTALLED BY EQUIPMENT DESIGNED TO SLICE INTO THE GROUND, THE TRENCH IS NOT REQ'D.

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SILT FENCE INSTALLATION (SHEET FLOW ONLY)



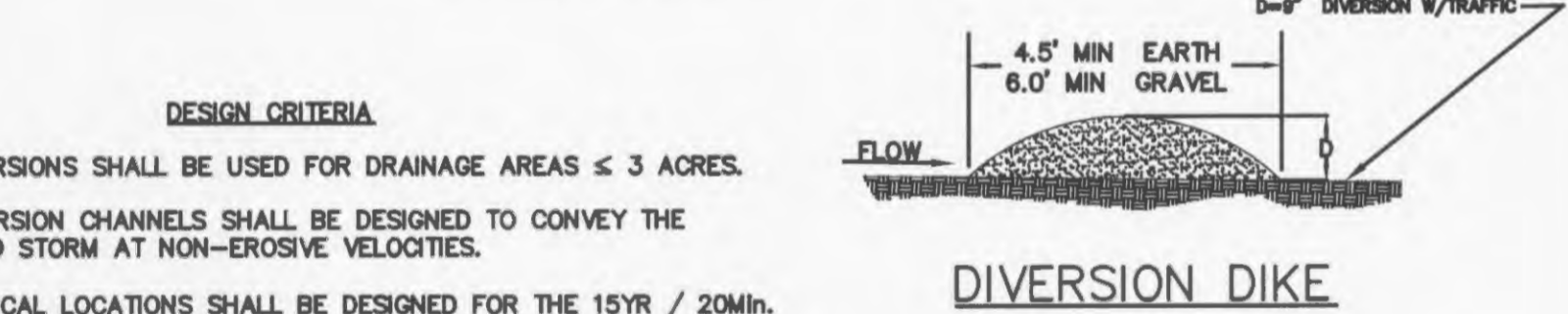
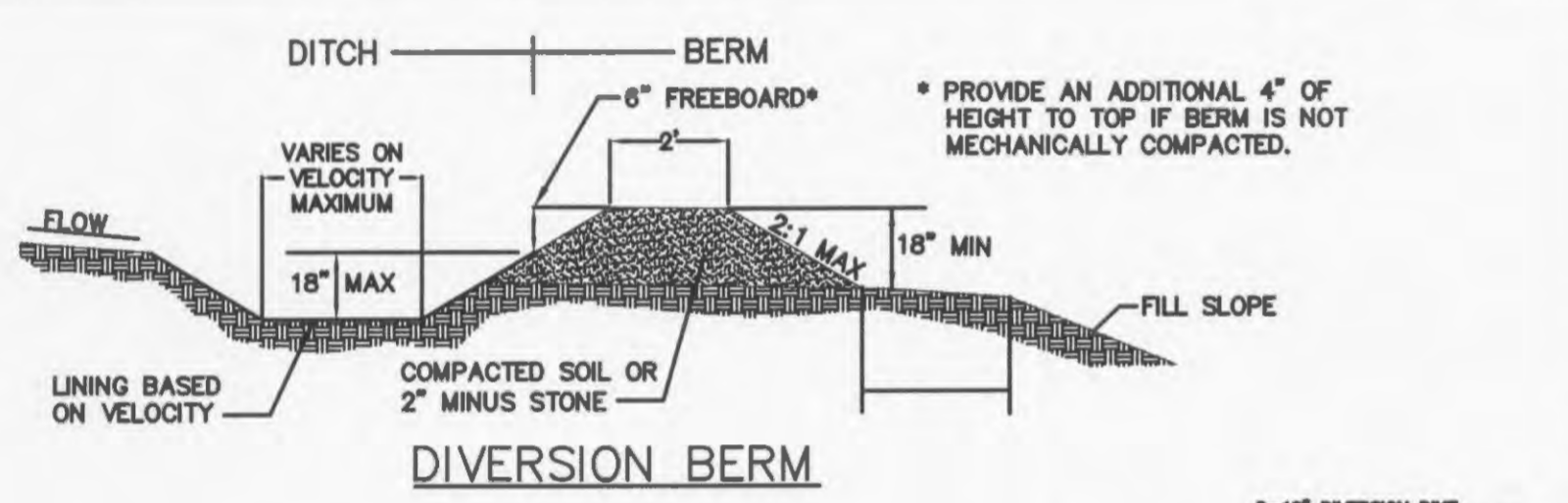
- DESIGN CRITERIA**
- MAXIMUM DRAINAGE AREA - 1 ACRE.
 - PEAK RUNOFF SHALL BE ≤ 2 CFS BASED ON THE 6-MONTH STORM.
 - STACK GRAVEL BAGS DOUBLE HIGH. PROVIDE GAP FOR DRAINAGE.

SPACING OF TRAPS

GUTTER SLOPE	S
LOW PT	15'
1%	20'
2%	15'
3% MAX.	10'

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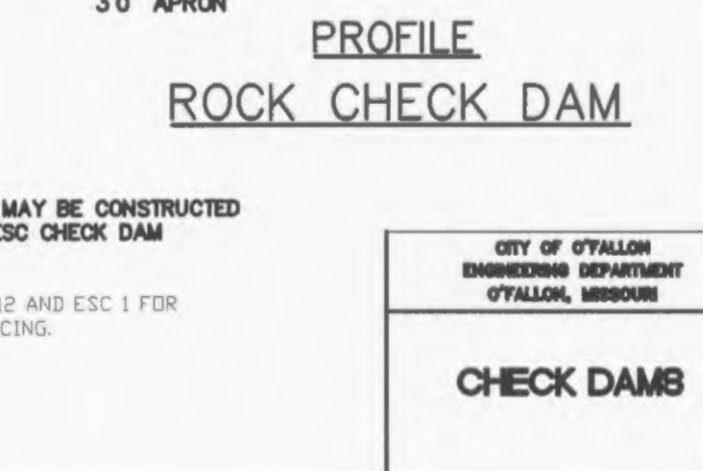
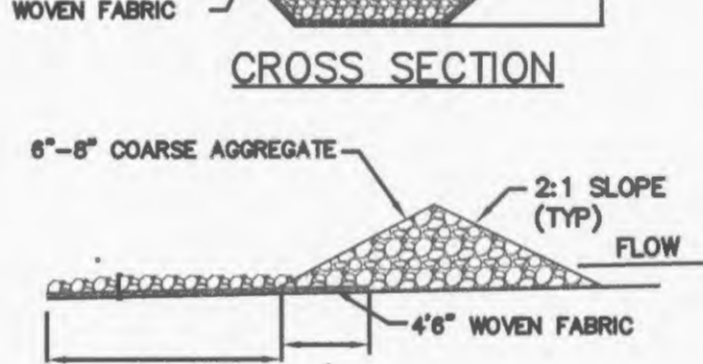
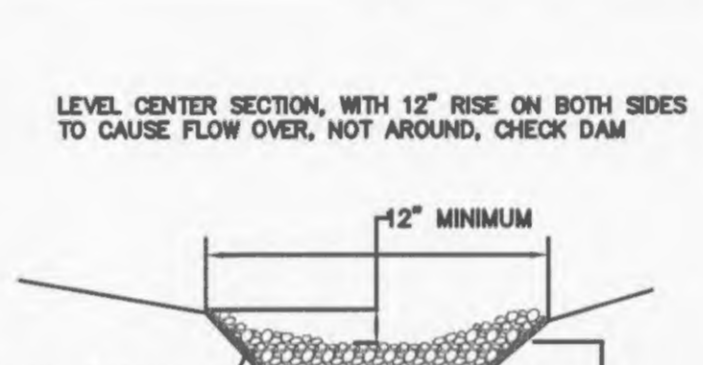
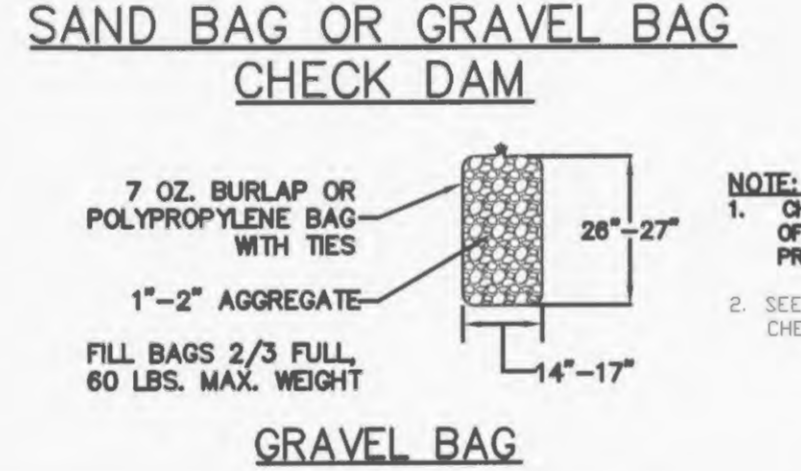
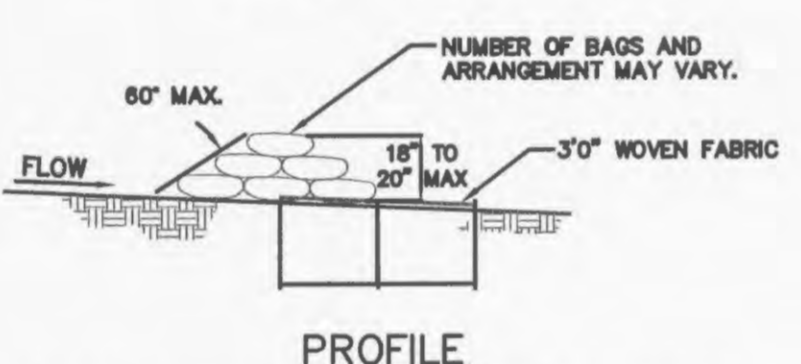
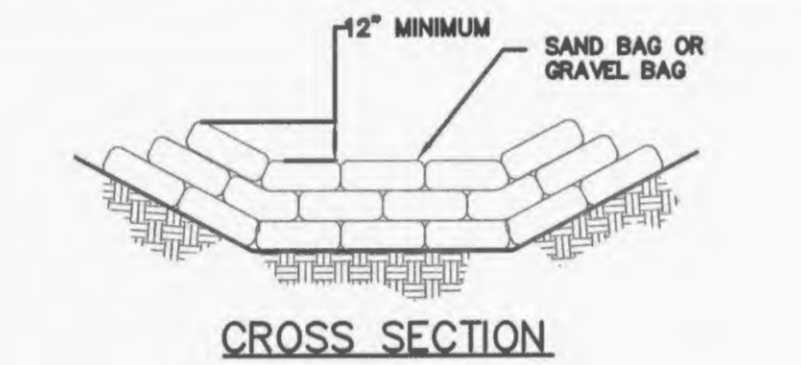
CURB INLET PROTECTION



- DESIGN CRITERIA**
- DIVERSIONS SHALL BE USED FOR DRAINAGE AREAS ≤ 3 ACRES.
 - DIVERSION CHANNELS SHALL BE DESIGNED TO CONVEY THE 6-MO STORM AT NON-EROSIVE VELOCITIES.
 - CRITICAL LOCATIONS SHALL BE DESIGNED FOR THE 15YR / 20min. STORM.
 - MAXIMUM CHANNEL SLOPE OF 3% WITHOUT CHECK DAMS.
 - SWALE SEDIMENT TRAPS ARE TO BE USED IN HIGHLY EROSION AREAS.
 - CHANNELS SHALL BE PROTECTED USING APPROPRIATE CHANNEL LINERS.
 - CHANNEL OUTLETS MUST BE STABILIZED.
 - STORM SEWERS MAY BE USED IN LIEU OF OPEN CHANNELS.

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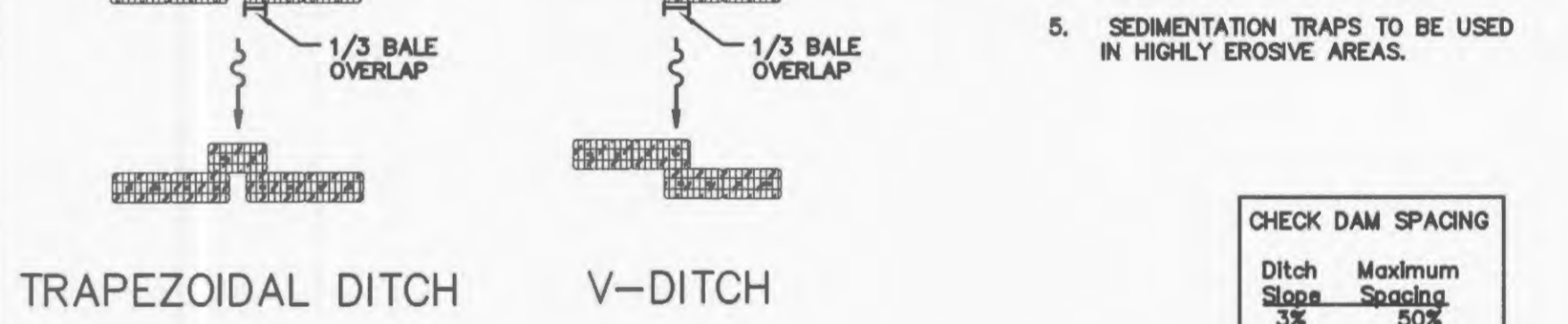
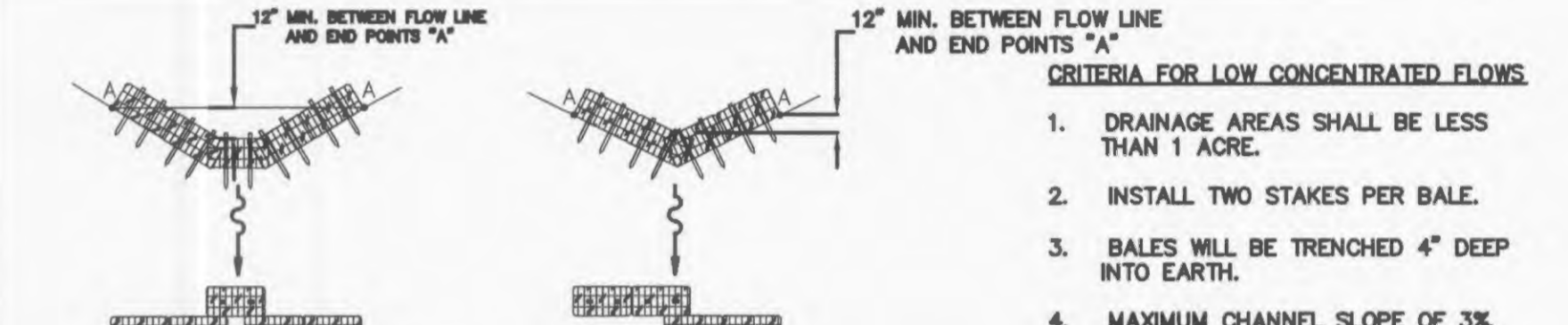
DIVERSION BERMS + DIKES



- NOTE:**
- CHECK DAMS MAY BE CONSTRUCTED OF SEVERAL ESC CHECK DAM PRODUCTS.
 - SEE TABLE 60-12 AND ESC 1 FOR CHECK DAM SPACING.

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CHECK DAMS



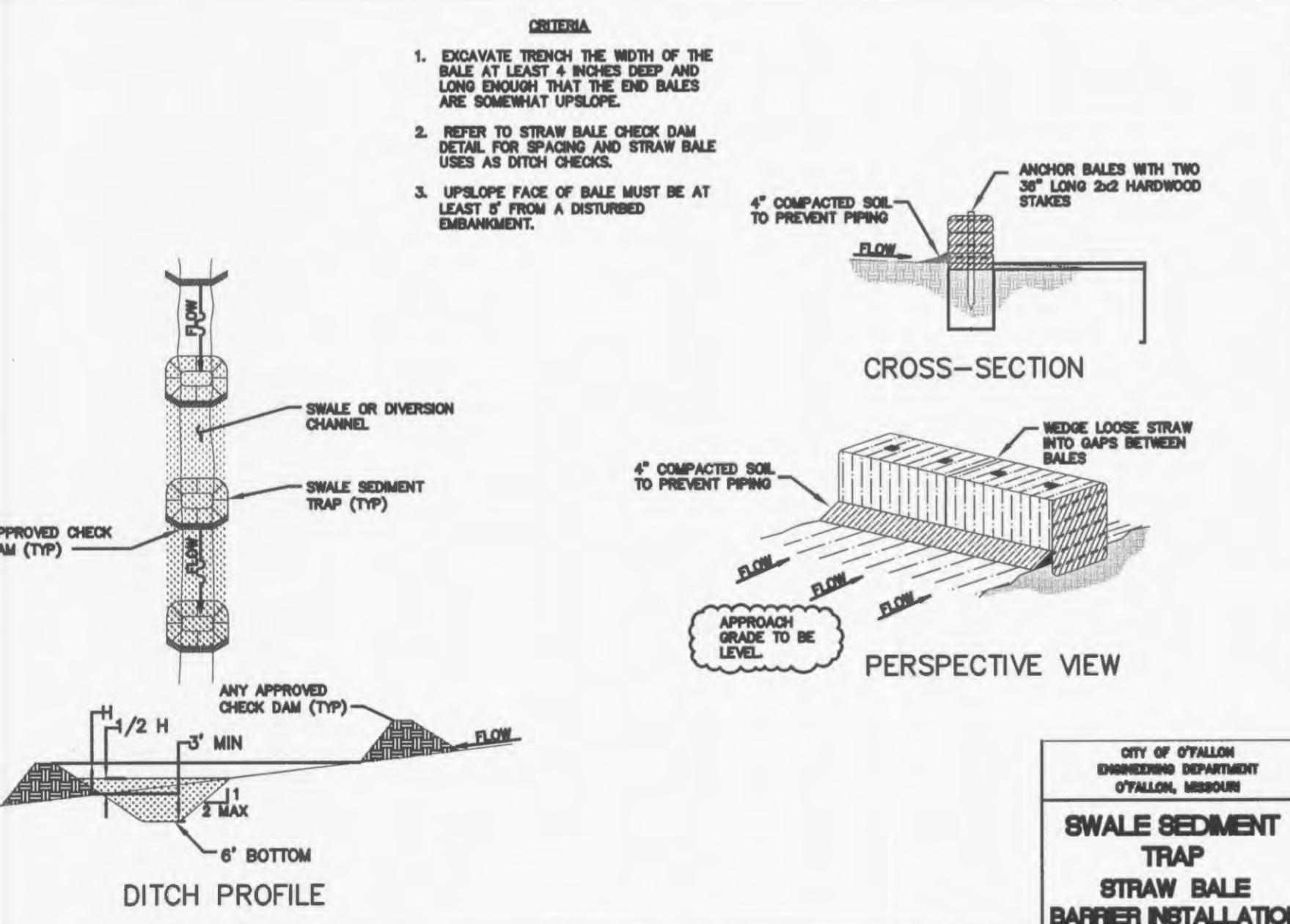
- CRITERIA FOR LOW CONCENTRATED FLOWS**
- DRAINAGE AREAS SHALL BE LESS THAN 1 ACRE.
 - INSTALL TWO STAKES PER BALE.
 - BALES WILL BE TRENCHED 4" DEEP INTO EARTH.
 - MAXIMUM CHANNEL SLOPE OF 3%.
 - SEDIMENTATION TRAPS TO BE USED IN HIGHLY EROSION AREAS.

CHECK DAM SPACING

Ditch Slope	Maximum Spacing
3%	50'
2%	75'

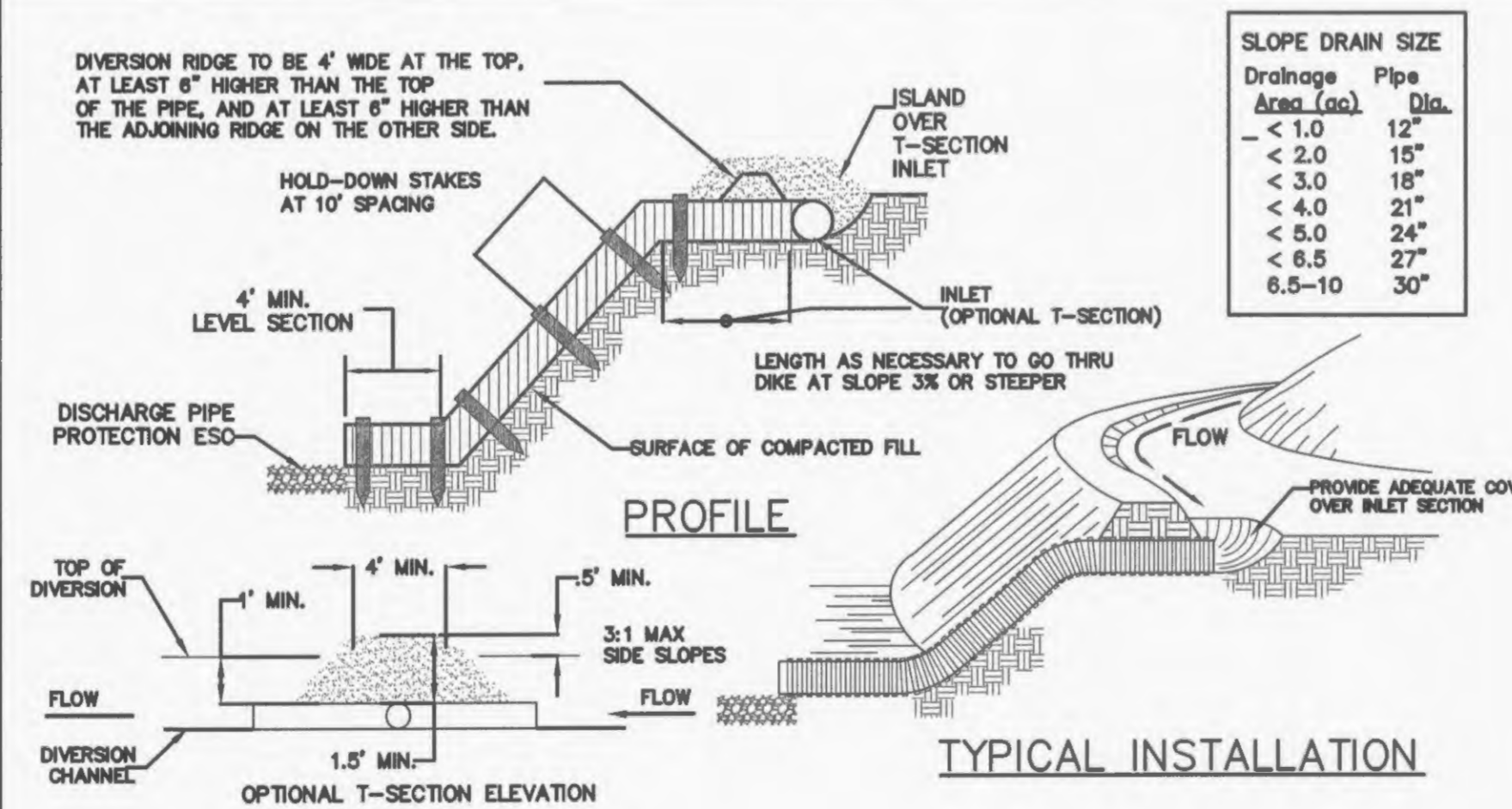
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STRAW BALE CHECK DAM



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SWALE SEDIMENT TRAP STRAW BALE BARRIER INSTALLATION



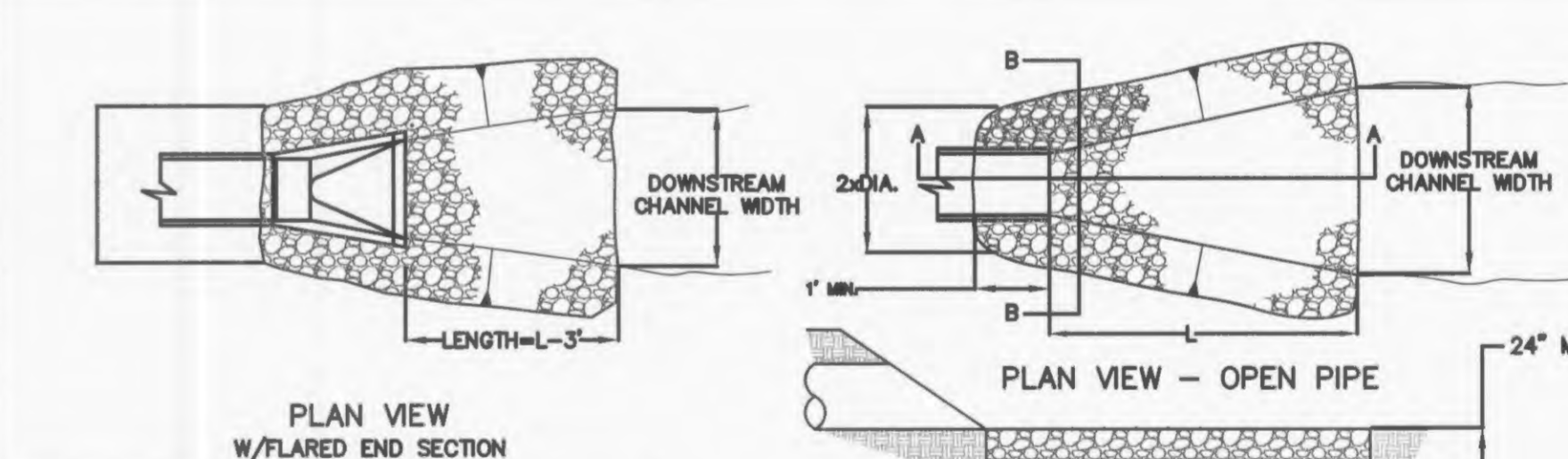
SLOPE DRAIN SIZE

Drainage Area (sq. ft)	Pipe Dia.
< 1.0	12"
< 2.0	15"
< 3.0	18"
< 4.0	21"
< 5.0	24"
< 6.5	27"
6.5-10	30"

- NOTE:**
- PIPE CAN BE CMP, PVC, FLEXIBLE TUBING, OR SIMILAR.
 - THIS METHOD MUST BE USED IN CONJUNCTION WITH OTHER ESC DEVICES. THIS IS NOT A STAND ALONE CONTROL DEVICE.

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TEMPORARY SLOPE DRAIN



RIPRAP SIZE & APRON DIMENSION

PIPE SIZE	VELOCITY < 5 FPS				VELOCITY < 10 FPS			
	ROCK SIZE	APRON DIM	ROCK SIZE	APRON DIM	ROCK SIZE	APRON DIM	ROCK SIZE	APRON DIM
(Inch)	(Inch)	(Inch)	(ft)	(Inch)	(Inch)	(Inch)	(ft)	(ft)
12	5	9	15	12	5	9	15	16
15	5	9	15	14	5	9	15	18
18-24	5	9	15	16	9	14	24	20
27-30	5	9	15	18	9	14	24	22
36-42	5	9	15	22	12	18	27	28
48-54	5	9	15	24	12	18	27	30
60-66	12	18	27	34	15	24	30	38
72-84	15	24	30	42	15	24	30	46
96	18	27	30	50	18	27	30	54

dia - NOMINAL DIAMETER
dia_{max} - MAXIMUM DIAMETER
T - THICKNESS
L - LENGTH

- DESIGN CRITERIA**
- FROUDE NUMBER MUST BE ≤ 2.50 .
 - USE 3 TIMES PIPE DIAMETER FOR DOWNSTREAM CHANNEL WIDTH IF THERE IS NO DEFINED CHANNEL.
 - BANK PROTECTION HEIGHT TO BE 2/3 TIMES PIPE DIAMETER.
 - ROCK SLOPES SHALL BE NO STEEPER THAN 3:1.

CITY OF O'FALLON
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O'FALLON, MISSOURI

TEMPORARY OUTLET PIPE DISCHARGE PROTECTION

PROJECT TITLE
IMPROVEMENT PLANS
BROOKSIDE
VILLAGE B 2-A
DETAILS

PICKETT, RAY & SILVER, INC.
CIVIL ENGINEERING, LAND SURVEYING,
AND NATURAL RESOURCES SERVICES
22 Richmond Center Court
St. Peters, MO 65076
Phone (636) 397-1211 Fax (636) 397-1104
www.prs3.com 1-800-708-3918
TASK 005

ENGINEER'S AFFIRMATION
I, the undersigned, being a duly licensed Professional Engineer in the State of Missouri, do hereby certify that I am the author of the design and drawings herein, and that I am a duly licensed Professional Engineer in the State of Missouri, and that I am not providing any design or engineering services for this project under any other name or title, and that I am not providing any design or engineering services for this project under any other name or title, and that I am not providing any design or engineering services for this project under any other name or title.

KARL A. SCHOENKE, P.E.
PROFESSIONAL ENGINEER
LICENSE NO. 2003015038
ELECTRONIC SEAL

Developer / Owner Information
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2289 Technology Drive, Suite 150
O'Fallon, Missouri 63368

P+Z No. 2603.04
City No. 14-156-SP
Page No. 16 of 19
DETAILS

City of O'Fallon Standard Subdivision Notes and Details - June 2010